BIOS

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A Message From Your President

By Karoliina Munter, P.Biol.

This is my very first presidential address, so I'll start with a few introductory words about myself. I am an aquatic biologist working in environmental consulting. I grew up in Finland, moved to Calgary in 2006, and have lived here ever since. Why move here of all places in the world? Well, the story includes a Calgarian I ran into in Helsinki and a blind date. Ask me about it sometime. I have been a member of the ASPB since 2007 and after several years of volunteering on the Professional Development Committee, I was happy and honoured to take on the role of President.

It has been a very busy and productive summer for the ASPB Board of Directors, which started its term in April, and we are looking ahead to an equally busy and productive fall. Since the AGM, your Board has had five Board meetings and additionally worked on a new Board governance model during a 2-day workshop.

Now hold onto your hats ladies and gents, here come the juicy and fascinating bits! The Board's work has focused on the following key strategic topics:

- Development of new membership category options
- Discussions with other professional organizations and the Alberta government about potential new legislation
- Preparations for a change to Policy Governance®

Membership Category Changes

There are two key reasons ASPB is currently contemplating changes to our membership categories. Firstly, over the years it has become apparent that there are individuals who work in biology-related fields that do not fulfil the current membership requirements for a PBiol designation, but who identify themselves as biologists. Secondly, other "neighbouring" professional organizations are planning or have implemented changes to their membership categories that create a more inclusive setting. This direction is also in alignment with the messaging from government liaisons of the Professions and Occupations Office.

As discussed at the AGM, the intention is not to dilute the PBiol status, but rather to enlarge it, in order to ensure that ASPB remains inclusive and current in its membership categories. The changes contemplated at the moment are the addition of a Professional Technologist – Biology (PTBiol) category and revisions to the experience category of the PBiol designation.

Information on the contemplated changes will be brought to the Membership this fall. All interested parties, both members and non-members, are encouraged to provide input. Stay tuned for an announcement of Open Houses around the province this fall!

New Legislation

It has been recognized by the Alberta Professions and Occupations Office that the current legislation ASPB is governed under (POARA), is not up to date with many other professional organizations in the province, and that ASPB should investigate options for new legislation.

In recent months, the Board has been discussing different options for moving forward with new legislation, together with the chemists and foresters. Biologists, chemists and foresters have been identified by the government and by each other as having similar needs. The three professions are currently preparing a Memorandum of Understanding that provides a framework for exploring options for new legislation development. These discussions are ongoing and the Board will update the Membership on its progress.

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BIOS is published for the enjoyment and benefit of the members of the Alberta Society of Professional Biologists, and for those interested in the field of professional biology. Articles or comments are welcomed and should be sent to announcements@aspb.ab.ca .

President's Message Continued

Policy Governance

The Board is in the process of implementing Policy Governance®, that will delegate management responsibilities to the Executive Director, in order to allow the Board to focus on larger issues, strategic goal setting, and to lead ASPB through organizational change.

The Board and our Executive Director are expecting to be able to make this organizational shift within the next few months. Our goal is to use the Board's volunteer time and operational budget as effectively as possible, and the new model provides the tools to do exactly that.

If you wish to discuss any of these updates further or want to get involved, please don't hesitate to contact me at president@aspb.ab.ca!

Executive Director's Report

By Jennifer Sipkens

It is hard to believe that fall is here. The summer has been very busy for ASPB – something I was not expecting, given that many of our members head into the wilds of Alberta and beyond during the summer months. The Board was hard at work this summer working on projects as outlined by President Karoliina Munter. We implemented Twitter this summer and I want to say a special thanks to Randy Krichbaum, who has been doing an amazing job at finding relevant and timely information to tweet, and I am happy to say we have over 160 followers! We also have a LinkedIn account, where members can follow ASPB and be the first to know about events.

Conference planning continued through the summer, and the Call for Papers deadline has been extended to October 31st. We are really excited about the theme of the conference, "Endangered Regulatory Bodies: Exploring Species, Professionals, and Regulations in 2014 and Beyond". The conference will take place in Edmonton, on April 9th and 10th.

Our Registration Committee has also been hard at work reviewing applications to ASPB, and we welcome new members who have received their membership this summer. Look for your names listed in the Spring 2014 edition of BIOS.

Last fall the ASPB conducted a membership survey. Since then, several items that members indicated they would like to see offered by the Society have come into effect or are being developed. The Practice Review Committee has developed a web-based tracking program for Continuing Competence and this will be launched in Fall 2013. A salary survey was also completed and the final report will be ready and posted online shortly. A popular request included discounts on insurance: ASPB announced a partnership with TD Meloche Monnex and HUB International this past spring. Details are in the Member's only section of the website.

ASPB had contracted the services of a public relations intern from Mount Royal University and she has put together a communications plan for ASPB that includes outreach to students and employers of biologists. To help implement the plan we started a Student Outreach Committee to engage students at all university campuses in Alberta. We also have an ASPB student representative at the University of Lethbridge who will bridge the link between ASPB and students – it is hoped we can expand this program to other universities, so if an ASPB student member is interested in this position, please let me know!

Members requested more networking opportunities and more professional development options. The Edmonton and Calgary Professional Development committees have listened and have organized BBQ's in each location along with several professional development opportunities. At the time of writing this article there are eight events in three locations, with several more being planned!

As you can see there's quite a lot that has happened over the past few months! None of this would have been possible without our volunteers: from the Board of Directors to those participating on committees, ASPB has an amazing and inspiring group of people who put in many hours to deliver services to all ASPB members. If you would like to be a part of this incredible team, check out the Job Market and Volunteer page of the ASPB website to review current opportunities.

ASPB 2014 Conference

Endangered Regulatory Bodies:

Exploring Species, Professionals, and Regulations in 2014 and Beyond

April 9 and 10, 2014, Edmonton, Alberta

The Alberta Society of Professional Biologists' (ASPB) 2014 conference will be held at Delta Edmonton South in Edmonton, Alberta. Recent changes in federal and provincial legislation have led to new assessment requirements, additional areas and species requiring protection, and uncertainties for biologists, government agencies and industry in Alberta. The ASPB invites submissions for presentations describing recent challenges and new approaches to dealing with and managing changes in regulatory acts. Submissions may be examples from Alberta or elsewhere if demonstrated applicability to regulatory acts in Alberta.

This conference will provide attendees interested or directly involved in environmental impact assessments or environmental compliance monitoring with a forum to discuss current issues and challenges in Alberta. Share your successes and challenges, facilitate new ideas, contribute to the discussion and debate the issues!

Contributions are not limited to, but may focus on the following:

- Updates and changes to the Fisheries Act, Navigable Waters Protection Act, the Alberta Water Act and the Environmental Protection and Enhancement Act;
- Changes to regulatory bodies and implications of changes to the Canadian Environmental Assessment Act;
- The Alberta Wetland Policy;
- Current status, research, collaboration and/or management of species at risk or species of management concern and COSEWIC updates;
- Examples of collaboration for managing environmental and regulatory issues;
- Areas of professional practice (liability, integrity, ethics, competency, clients, stakeholders, timelines, etc.).

Call For Papers

The 2014 ASPB Conference Committee welcomes paper or poster abstract submissions for review. Deadline for receipt of abstracts is October 31, 2013, and must follow the format outlined on the ASPB website www.aspb.ab.ca/events/2014-aspb-conference.

ASPB Plant ID Workshop Delivers the Goods

By Linda Zimmerling, P.Biol.

Chris Clement, P.Biol. presents material during the classroom session of the workshop. Photo credit L. Zimmerling, P.Biol.

On Saturday, June 8, 2013, Chris Clement, P.Biol., and Dave Critchley, P.Biol, presented the ASPB's Introductory Plant Identification Workshop. The day began in the classroom where participants focused on plant taxonomy, dichotomous keys, plant physiology, plant terminology, and common families and genera. Following this, the group travelled to Gray Nuns White Spruce Park in St. Albert, where Chris and Dave coached the group to use their newly acquired or recently refreshed skills to identify an amazing array of plants. Participants were then treated to a delicious lunch at Hole's in St Albert – a fabulous 2.5 hectare site housing a retail greenhouse, nursery, show garden, trial gardens and growing ranges. The remainder of the day was spent at Riel Recreation Park, continuing the hands on plant identification experience.

Chris Clement uses a sample plant to work through a dichotomous key with participants. Photo credit L. Zimmerling, P.Biol.

Dave Critchley, P.Biol., engages participants in plant identification. Photo credit L. Zimmerling, P.Biol.

The weather was ideal, as the temperature was comfortably warm and the wind was sufficient to keep the mosquitoes at bay. Chris and Dave were outstanding in their ability to share their knowledge and keep the participants engaged. The workshop delivered as promised. The fact that this course qualifies ASPB members to earn 7.5 Professional development hours towards their Continuing Competency Requirement is a complete bonus! That, and as biologists, some bird identification happened along the way!

The next time you see this workshop offered, I suggest you sign up. The instructors were incredibly knowledgeable, and were able to share the material with participants at any level of experience.

Oil & Gas 101 Vimeo Corporate Rates

As you may be aware, ASPB hosted an Oil and Gas 101 workshop in Calgary and Edmonton and it was a huge success. We had recorded the presentation at NAIT, and it is available on the ASPB Events page for download for individual viewing only. However, we have had some requests for corporate rates, so companies can include the video in individualized training programs, or to view as a group (which the current program does not allow).

So, we have put together a corporate package for companies, and the info sheet is attached. There are two packages - discounts for bulk purchases of individual viewing and a group viewing rate. Please forward to anyone you think may be interested in offering this to their employees.

If anyone has any questions or needs more info, please contact me at jsipkens@aspb.ab.ca .

Obituaries: ASPB Mourns the Loss of Donald (Don) Laurie Dabbs

DONALD (DON) LAURIE DABBS, PAg., PBiol (1944-2013) KEY IN ESTABLISHING THE ASPB

By Robin Leech, P.Biol.

Don and Karol Dabbs in their field work clothes. In any other clothing, they are out of uniform.

On 14 April 2013, our long-time good friend, Don Dabbs, died unexpectedly of a heart attack at the age of 68 in Calgary. Don was born in Edmonton on 11 November 1944, the son of Don and Hazel Dabbs, and is survived by his loving wife and constant companion of 44 years, Karol. He will be sorely missed by all of us.

Don Dabbs was a very important personage with and for the ASPB. The two things that most ASPB members will not know about Don Dabbs are that not only was he a life member of ASPB, he was also a founding member. He had ASPB Membership # 02. At meetings, you might have seen him quietly infiltrate the seated membership, greeting and talking with members. He always looked straight into your eyes when he shook hands - the sign of an honest person.

In the rustic, farmland setting of Scott, SK, Don spent much of his young years hunting and hiking in coulees. While in the coulees, he photographed anything and everything - things that moved, and some that didn't. He had a strong ability and interest in technologies, best expressed by photography.

In due course, the family moved to Saskatoon where Don Sr became Professor in Agriculture at the U. of S. Don finished his high schooling in Saskatoon, and then on to the U. of S. in Agriculture, finishing with a BSc.Ag in 1969, and an MSc in Plant Ecology in 1971. Ever the consummate photographer, he continued it while working on the undergrad paper, The Sheaf, and from there to the annual year book, The Greystone. During his grad studies, he developed an interest in the Arts – a super mix with photography!

Don and Karol were married on 5 July 1969, in Swift Current, and they spent their first summer sloshing around in the Cumberland Marshes and at Ft Chipewyan while employed by the CWS. Karol was Don's field assistant. (ahem, ahem!) These wonderful times confirmed their mutual love of the wild and natural areas of Canada. In 1971, when Don finished his MSc, they moved to Calgary where Don began his 40-year career in environmental management.

In the spring of 1971, Don was the first biologist hired to begin environmental research for the proposed Arctic Gas Pipeline. What a cookie jar to open before a biologist. The cookie jar was about mapping vegetation, identifying rare and endangered plants, conducting studies on caribou, polar bear, raptors and fisheries. His role was critical in ensuring pipeline integrity in areas of permafrost. He was responsible for gathering a tremendous knowledge of Canada's Arctic.

I met Don in late 1974, probably October or November. At that time, Stu Smith and I were the only two souls in the newly formed Research Secretariat (RS) of Alberta Environment. The RS coordinated research within AltaEnv, but in short order we were also involved with coordinating AltaEnv research needs with those of other departments where the intended research was similar. As I am writing this, I can see Don's handprints everywhere. Perhaps the RS was set up with assistance from Don. It is the kind of thing that he would have loved to get his fingers into.

The ASPB had its formal beginnings in the office of Stu Smith and the RS. Don, Judy Smith and a few others were called in to try to help establish a new professional biological society. I was the recording secretary for many of the meetings leading up to the registration of a new society name that was registered with the Alberta Government in the spring of 1975. Meetings were held shortly after.

In 1991 our petition for a Society went before the Alberta Legislature, and was accepted. The ASPB had become a registered Professional Regulatory Organization (PRO), with the right to sign documents as Professional Biologist or just P.Biol. This is known as Right to Title. Don spent endless hours helping the ASPB get off the ground. Don was able to obtain much needed materials from the Alberta Agrologists. Some of us tapped into APEGA and other sources.

After graduating in 1978 from the International Environmental Management E.M.I., Geneva, Switzerland, Don became the Environmental Manager for Shell Canada's Alsands Energy Ltd.

Don was a recognized expert in community relations and environmental planning. He testified on numerous occasions as an expert witness before regulatory tribunals in the US and Canada. As co-founder, vice-president, CFO and director of Birch Mountain, Don was key to Birch Mountain achieving environmental approvals for two major limestone projects in northeastern Alberta. He also put into place a marketing company jointly owned with the Fort McKay First Nation.

Don was also tied in with the Nature Conservancy of Canada (a Director for the Alberta region), and the Glenbow Ranch Provincial Park Foundation. Don and Karol were especially excited about their association with the Jane Goodall Institute of Canada. For this group, Don and Karol went to Uganda and worked with village primary school teachers on environmental issues.

All of these endeavors, some professional, point a common thread that gave continuity to Don's life: his concern for the environment and the preservation of natural spaces. I think all of us can relate to these feelings and concerns. Don was a man filled with curiosity and enthusiasm in both his professional and private lives.

We exchanged comments on our latest activities and where it all was leading. We won't be having those discussions any more, but I can sit back to reflect on them, and more importantly, to enjoy them.

Special thanks go to Karol Dabbs for providing information on Don, and the picture for this article; Duane Johanson, P.Biol., Judy Smith, P.Biol., Susan de Caen and Harvey Martens, P.Ag., for information and materials about the life of Don.

and Kristina Norstrom – Lost Too Early and Missed So Greatly

On Donald Dabbs
By Jeff Green, P.Biol.

Donald Dabbs was a founding member of the Alberta Society of Professional Biologists. During the mid-1970s, he, along with a number of other senior members, saw the need for an association to represent professional biologists in Alberta. In 1975, this core group developed the bylaws of the Society and registered the Society under the Societies Act of Alberta.

He was an integral member of the Society, serving two terms as President. He actively promoted the need for the Society with government agencies, industry, biologists, other professional organizations/associations and the public.

Don completed his Bachelors in Agriculture in 1969 and a Masters in Plant Ecology in 1971. He began his professional career as a member of the Canadian Wildlife Service conducting studies of large delta ecosystems, including the deltas of the Saskatchewan and Peace-Athabasca rivers. Beginning in 1971, Don, as an employee of Williams Brothers and then Northern Engineering Services, led the planning and implementation of the environmental studies for the original Mackenzie Valley Pipeline application. In 1973, he took on the role as the Environmental Research Coordinator for the Canadian Arctic Gas Project.

The demand for biologists by these two large projects led to the creation and establishment of environmental consulting as a new line of employment for biologists. This led Don to see the need for biologists to be recognized as a profession and be represented by a Society that would regulate professional practice.

Don's career in biology continued to expand, first as the Environmental Manager for Hardy and Associates (now AMEC) during 1974 to 1978, then as the manager of Environmental Affairs for Alsands Energy Ltd. during 1979-1982. In 1982, he established his own consulting firm, Dabbs Environmental Services. This company joined Concord Scientific in 1988 and Don remained there until 1997.

Throughout this entire period, Don worked to promote the ASPB through the hosting of annual professional conferences; increasing awareness of biology as a profession among government, industry and public interests; and meeting with the Alberta government to establish biologists as a professional society. He was a tireless supporter and encouraged many practitioners to consider and eventually join and strongly support the ASPB. Through the efforts of Don and others like him, the ASPB successfully obtained exclusive use of the title Professional Biologist in 1991, under the Professional and Occupational Associations Registration Act of Alberta.

In 1998, Don took on a lead role with Niaski Environmental, an innovative waste management firm. In 2000, he became Senior Vice President for Birch Mountain Resources. Throughout this period he remained a member and strong promoter of the Society. He also was an avid supporter of the Nature Conservancy of Canada and a proactive member in the Alberta Chapter.
Don passed away suddenly in April 2013. As was noted by several of our members who spoke at Don's memorial service, Don was a forward thinker, a pioneer of our Profession, a great colleague, and a consummate Professional. He is sorely missed.

Remembering Kristina Norstrom (September 11, 1973—May 29, 2013)

By Barb Maile
(original article prepared for The Wildlife Society, and reproduced in The Alberta Wildlifer)

Kristina started working with Wildlife Management as an Area Biologist in March 2008. She was a consummate biologist and boundless advocate for wildlife, mentally and physically a hard worker, was the first to volunteer for new projects and assist colleagues in her Area and across the province. She had a thirst for knowledge combined with an astounding ability to retain everything. She was a wealth of information on a wide range of topics - if she didn't know a particular answer, she would find the answer before she completed a meeting or conversation – indispensable to our wildlife group! She loved field work and spent many hours conducting wildlife surveys (ungulate surveys, caribou monitoring, amphibians, colonial waterbirds, snowshoe hare transects, sharp-tailed grouse, barred owl) or volunteering with Fisheries colleagues on their sturgeon program and index netting. Provincially she provided insight and leadership through multiple task groups aimed at developing or improving upon sensitive species guidelines, riparian best management practices, and Forestry ground rules – ensuring that Alberta wildlife had a strong voice in the boreal systems she worked in. She had just returned from the Western States & Provinces Deer & Elk Workshop in Montana with a few colleagues and was looking forward to being on several provincial game management teams with the goal of reviewing / rewriting those provincial game management plans.

She took on anything and enjoyed every aspect of her work and life. Much of her personal time was spent enjoying the outdoors - camping, canoeing, hiking, exploring – or working on her acreage. The rest of the time she was reading, constantly learning!

She was a quiet individual but after a few minutes, you easily recognized her abundant qualities and knowledge. She was a gentle and caring person and that combined with her wit and generosity will be greatly missed by her many friends and colleagues.

Interview with a Biologist That Used Handcuffs in His Field Kit: Ken Chatel, P.Biol.

By Ngaio Hotte, P.Biol.

Investigating illegal narcotics operations and cross-border smugglers are not the responsibilities of a "typical" biologist. But if one thing is clear from the biologists featured in this column, it's that there is no such thing as a typical biologist!

Ken Chatel is the Manager of Law Enforcement Operations with the Law Enforcement Branch of Parks Canada. He is responsible for overseeing law enforcement operations, including a staff of park wardens across Alberta and British Columbia. Prior to joining Parks Canada in 2010, Ken was employed with the RCMP, where he worked in several positions within the organization related to illegal trade in endangered species. Here, he used his training in biology and zoology to understand which plant and animal species were being traded and where and to estimate the demand. He has been involved in prosecuting smugglers exporting tigers out of India, lions out of Africa, and other species.

Ken Chatel examines a pair of seized elephant tusks. Photo credit Drew Mahaffey

Ken started a combined undergraduate degree in Biology and Zoology at the University of British Columbia in the 1970s, joined the RCMP in 1978 and began working with endangered species in 1980 and 1981. The flexibility of Ken's training in the biological sciences has enabled him to apply his education in several different fields. As an undergraduate, Ken worked for BC Fish and Wildlife in the summers, conducting research on grizzlies and deer and relocating geese in the Lower Mainland. After travelling and completing correspondence courses, he finished his degree at the University of Alberta in 1991.

After four years of University, Ken had hopes of moving from a temporary position as a Wildlife Technician to permanent job as a Wildlife Officer with BC Fish and Wildlife. However, there were no permanent positions available at the time, so Ken turned his attention to the RCMP, where he spent the next 31 years of his career. With his background in wildlife and a strong interest in biology, working in illegal trade in endangered species was a natural fit. Ken knew he wanted to be involved in environmental and endangered species enforcement, so he found out who was responsible for these areas within the RCMP and then worked to get involved in their sections. He pushed his superiors to investigate wildlife-related violations in different areas and constantly sought new ways to apply his skills.

"When I started getting two to three million dollars in seizures, my bosses left me alone to do it, rather than pushing enforcement of speeding tickets," Ken recalls.

Ken was a pioneer in the field. When he joined the RCMP, there were no guides or manuals to help enforcement officers to identify species. Once in his new role at the RCMP, Ken found a way to apply his interest in endangered species and carved out a niche for himself. He worked on a case-by-case basis, conducting independent research and seeking expert advice to identify samples of confiscated materials.

"I was one of the early experts in identifying species," Ken explains. "Sometimes I contacted other experts to identify a species, find out if it was endangered and then identify the relevant permits."

Ken Chatel investigates a seized lion rug. Photo used with permission.

Ken specifically recalls an investigation into vicuña hair rugs that were being imported into Canada via Edmonton. The animals are endangered, but their hair is very similar to that of alpaca, making identification and prosecution difficult.

"I had to go back and find books from the 1930s that identified vicuña hair samples," Ken recalls. "I also had to take hair samples and then use the Alberta Fish and Wildlife labs to match scale patterns on the hairs to prove they belonged to vicuña. I went to farms in Canada that were raising these animals, in person, then matched the scales on the hair to the hair collected during import." "I was able to shut down a company that was bringing in rugs branded as alpaca. It helped to have the biology background to read the scientific manuals and not rely on other experts to interpret the information."

Ken travelled to the US on three occasions for hands-on training with national experts in trafficking and endangered species.

Interview with a Biologist Continued

"I learned a lot from the USFWS because they do a lot of work related to trade, particularly out of the Los Angeles airport," Ken recalls. "I learned to do identifications and became familiar with techniques that are used to smuggle and then I taught other people in Canada."

Ken also worked extensively with enforcement agents in New Zealand, Italy and other countries.

"Working with international bodies, including New Zealand, was particularly interesting," he says. "They have some very foreign and interesting species. Anytime something new comes in, you have to find out how to identify the species."

As he accumulated knowledge and expertise, Ken began to develop manuals and guides for other enforcement officers. Much of his contributions were focused in the areas of illegal trade in Asian Medicinals.

In 1999, Ken received an Emerald Award for his work on enforcement of endangered species legislation.

Over time, Environment Canada increasingly took over responsibility for enforcement of regulations related to trade in endangered species and Ken became more involved in prosecutions related to environmental regulations and illegal narcotics operations. He worked alongside criminal investigators to link criminal and environmental prosecutions related to drug and methamphetamine labs, where hazardous chemicals, pesticides and other substances were being used and improperly discarded.

"It sounds like fun until you go to the first one; then you realize how dangerous these places can be," Ken says of his experiences with on-scene investigations.

He was also involved with major events like the Olympics and the G8 Summits in Alberta and Ontario, where he oversaw the operations of police to ensure compliance with environmental laws and regulations.

Ken believes that changes in government and public understanding of the seriousness of pollution and trafficking in endangered species shows how priorities evolve over time.

"The pendulum swings," says Ken. "In the 1980s, nobody was doing this work in the field of illegal trade. Then, at the last G8, the organizers hired people to attend the Summit to ensure everything that was happening on the part of the RCMP and other police had minimal impact on local wildlife."

"We looked at how to protect both the species and the people in an area with lots of equipment and lots of nesting sites and wildlife," he continues. "Two full-time staff were there for three and a half weeks. It's good to see that they are taking those steps now: Recognizing the impact that those operations have, doing what they can to reduce damage and, if any damage does occur, ensuring that reclamation is set in place."

Another big change Ken believes shows increased awareness around the importance of endangered species is the number of published resources now available to enforcement officers.

"Environment Canada has at least ten manuals out now about identification of different trees, birds, crocodilians and so on, that show the species, skins and derivatives and describe how to identify them," he explains. "All these resources didn't exist when I began my career."

"Teaching people how to identify different species helps to build officers' interest and confidence in identification," says Ken. "Educating the whole group and getting them excited was fun."

While these developments have been positive, Ken believes there is still room for improvement in how different enforcement agencies and groups work together. He worked to improve cooperation during his time with the RCMP but recognizes that the issue is far from resolved. Ken has been involved in teaching the Cross-Ministry agency in the province of Alberta major case management and investigation skills that help Ministries to work together when an issue arises.

"We are still working with multiple agencies to improve enforcement of multiple violations at one site," he says. "No agency has the funding to investigate all offences. I have always enjoyed tackling a problem with multiple agencies working together."

Outside of his job, Ken volunteers with the Calgary Science Network and seeks out experts in various fields to develop educational programs and deliver these programs to elementary schools. Ken has developed his own program and teaches Grade 6 students about the impact of taking souvenirs from the environment in other places and what they can or cannot bring back to Canada.

Ken Chatel cleans the bones of seized tiger remains. Photo credit Drew Mahaffey. The bones were later made into a skeleton display.

Ken also Chairs the ASPB Professional Development Committee in Calgary. He has been a member of the Alberta Society of Professional Biologists since 1995 and, though now retired, he hopes that his continued work with the Committee will encourage biologists to strive to develop their skills on an ongoing basis.

"Continuing education is important no matter where you are in your career," Ken asserts. "Keep learning and developing your skills. Never stop, no matter how many years in you are. Go to lectures and socials, meet and chat with people. You never get bored talking to experts in this field and you never know where it will benefit you down the road."

MENTOR AND MENTEE RELATIONSHIPS (One of the best kept secrets in ASPB)

By Robin Leech, P.Biol.

An explanatory note about ASPB's Mentorship Program

Caroline LeCourtois, BIT, volunteering for the Edmonton and Area Land Trust (EALT) "Wind up for Wildlife" event on July 6th, 2013 on the Golden Ranches property east of Edmonton. Thanks to connections from Robin, Caroline helped pull weeds and wind up old bar-wire fence to allow wildlife better access to water and passage in and out of the property. In the photo from left to right: Markus Eymann, Caroline LeCourtois, Doug Webster, Jean Fukushima, Shibi Chandy. Photo credit: Edmonton and Area Land Trust.

ASPB has a Mentorship Program? You bet it does. It used to be a non-facilitated mentoring program whereby members simply registered their names into a pool list, and were then selected by other members when and as the need arose. This is the reason that very few members actually took advantage of it. The first steps were too intimidating to many.

As of Spring 2013, the Mentorship Program is a facilitated program whereby members who have registered with the program will be paired with a Mentee or Mentor by the Mentorship Program Coordinator, based on availability. The intent, if possible, is to pair members that share a common ground.

Now for My Mentor-Mentee Story

Caroline LeCourtois, BIT, visiting with Robin Leech, P.Biol., in his home in Edmonton. Photo credit: Lorie Taylor Leech

For some years running, I have put my name into the mentor brew pot to be selected as an ASPB mentor. Till this year, it was as though I were fishing in a bucket full of clear water, but not much else – no email, no letter, no phone call, no late night secret visit to our home. Just nothing! No mention or notice to tell me that a mentee is on the way. Should I have been so hopeful? I know that none of the 3 Alberta Universities has a budding araneologist (or spiderologist, but of course, all you biologists out there know the real term, don't you?)

Was I to wait for a graduate araneologist to apply to be a BIT? Just for me? Gimme a break! I mean, after all, there are no spider or taxonomy keeners coming up through the BIT ranks of ASPB. This I knew beforehand! If there were, I would have heard about it through my spy networks, correspondences, either with a professor or the student him/herself, even before they might have appeared as a BIT mentee.

So, I quit waiting. I quit expecting. I went about my normal business of identifying spiders, working as part of a research team doing the spiders of the prairie areas of AB, SK and MB. Would you believe that we found 819 species of spiders in the grasslands and adjacent ecozones? Other work entails being an editor, proof reading, and related activities. The scut work starts when dealing with thousands of spiders (or other small critters), the placing of them in small vials, putting labels inside the vial, filling the vials with ethanol, then inserting a neoprene stopper into each vial – all several thousand of them. Next came the filing and sorting the vials according to the spider families, genera, etc.

Dinesh Mategaonkar, BIT. Dinesh lives in Medicine Hat.

Then LO! THE CALLING CAME THIS YEAR. I lucked out with two mentees, one in the Edmonton area, and the other in the Medicine Hat area. There were agreements and similar things that had to be read and signed, designed to formalize this Mentee-Mentor Relationship. .... Oooops! I thought. What am I getting myself into? Better yet, WHAT have I got myself into? Give me a moment while I suck air. This is becoming intimidating. (The only other things I recall signing, regarding me being an ASPBer, were things related to the amount of time I spent being a biologist each year ... you know, how many hours did I spend doing this or that? Was it real biology – that is, biology that counts for credits?) Those were my first impressions and a first glance, but what the heck, I dove in. And I am very, very glad I did.

I now have 2 bits (er, I mean 2 BITs). I contacted each by email and phone to let them know what sort of critter they had been stuck with, and would now have to be dealing with. The Edmonton mentee expressed interest in birds, bird behavior and insects, and to a lesser degree, spiders (what had I been sent? – a wonderful Mentee – but of course!). Contacts with several good buds in CWS had her going out for a long day's work with a team of CWSers, starting at 6 in the morning, to practice with equipment that would be used this past summer in the northern half of Alberta. Her interest in leps (moths and butterflies) was an easy fix – lined her up with the list server:

Albertaleps@mailman.srv.ualberta.ca
and for general bugs:
Albertabugs@mailman.srv.ualberta.ca.
She already has a job, so this is all extra-curricular activity. A real self-starter.

The other mentee is interested in human impact on biodiversity. It turns out that one of the scientists at the Ag Can Research Lab in Lethbridge has a heap of data regarding spiders and sulfur pollution. The mentee and scientist are talking already.

I very quickly discovered that my role as a mentor is that of a go-between, and a networker, and then to back off and stay out of the way. The cadre of biologist contacts I have accumulated over the years (ornithologists, mammalogists, ecologists, entomologists, physiologists, agrologists, etc.) is the largest part of what I bring to the table. Many of these same contacts will become part of the networking for the mentees themselves in the present and future.

The above is the fun part. I thought that the above is all there is to being a mentor – make contacts, and give the mentee some of my contacts. For a while that is what it was.

Do I recommend being a mentor to the rest of the ASPBers? Yes, but only if you are willing to spend a lot of time working with the mentees to get them off and running. The more you do, the more rewarding the feedbacks become. I set up a loose schedule of meetings by email, phoning upon just to say 'hi'. Whether they need me or not becomes less important than just knowing I am there.

So, if the ASPB system calls YOU to be a mentor, go without hesitation – but you do have to be willing to commit time.

Acknowledgements:
I thank Myriam Zadnik, Mentorship Program Coordinator, for encouraging me to develop this article, and providing some background information. I also thank my wife, Lorie, for proofreading. And I thank my two Mentees, Carolyn LeCourtois and Dinesh Mategaonkar, each her or his own way, who has enriched my life just a wee bit, and enlarged my cadre of biologists by two.

It Pays Back: The Confessions of a Reluctant Mentor

By Bette Beswick, P.Biol.

Throughout my career, I have benefitted by being mentored by colleagues. So, when the ASPB called out for mentors, I felt an obligation to do my turn on the "giving" side of the equation. I wasn't really gung ho on the whole idea, but I felt it was something I should do.

I can't speak for how much my mentee, Holly Harley, has benefitted from the relationship, but I know that it has been great for me. Holly and I first connected when she was a student at Mount Royal University and had questions about the ASPB's academic requirements. Because I am the ASPB's Registrar, I helped Holly understand what was required. That led naturally into a more formal relationship through the ASPB's mentorship program. The project we decided to embark on was a review of the new federal environmental assessment legislation, something that we both felt we could benefit from (like doing 20 situps every morning before breakfast). We did that in, I will admit, a somewhat half-hearted way because we got sidetracked by things that we had more passion about. We ended up talking more about career opportunities for Holly, and she has been able to get some very promising leads from those conversations. Because of Holly's involvement with Mount Royal University, I have been able to connect with MRU's Biology Department. They have helped me pursue my burgeoning interest in entomology and arachnology, and I am collaborating with them in biodiversity studies at Beauvais Lake Provincial Park and developing a reference collection for MRU.

My perspective about being a mentor has changed. My initial feeling of obligation to participate has been replaced with enthusiasm. It really puts a smile on my face when Holly tells me that she has made progress towards a career in biology, and I appreciate that she has opened as many doors for me as I have for her.

See the Winter edition of BIOS for articles from the mentees!

Nominating for Soper Award as Easy as 1-2-3: Choose—Coordinate—Compile

By Dave Ealey, P.Biol.

Making a nomination for ASPB's most prestigious award, the J. Dewey Soper Award, represents more than just an opportunity to honour special men and women who, by their life's work, inspire Alberta's biologists and do credit to our profession. It also connects to our organizational history.

A total of 14 individuals (see list below) have received ASPB's premier award, including some from before it was named for one of Alberta's most renowned biologists—Dr. J.D. Soper. Some recipients have been instrumental in the formation and nurturing of the Alberta Society of Professional Biologists, some have enjoyed national and even international reputations, and all have contributed to the development of biology as a profession, particularly in Alberta.

Soper's numerous accomplishments included early Arctic explorations that led to the discovery of the nesting place of the Blue Goose (now a morph of the Snow Goose), a career as Chief Migratory Bird Officer for western and northern Canada, and an extensive post-retirement endeavour collecting and chronicling Alberta's mammals (author of the original The Mammals of Alberta). Soper's commitment to and communication about Alberta's natural history made him an excellent choice for designating such a significant award for biologists.

To make the process for selecting suitable candidates more transparent and to engage more members from the Society, a more structured nominating approach was developed in 2010. Since then, two awards have been presented and we've learned much from the process so far. It's time to encourage all members to consider whether they know of a suitable candidate for this award. Making a nomination is as simple as following the posted form (ASPB Awards website) and submitting it for review by the Awards Committee and, ultimately, the ASPB Board. To help prospective nominators, I offer the following three steps as guidance.

Choose

Has anyone inspired you? Perhaps a teacher, colleague, mentor, advocate...someone who, by their commitment to biology as a professional discipline, their willingness to communicate their expertise and knowledge widely to other biologists and the public, and their connection to the Alberta biological community, can be considered an ambassador for the profession. With over 1200 members covering a wide range of biological practice, the Society has nearly 5000 eyes and ears looking and listening for suitable candidates. Suitability is assessed as part of the nomination form in three or more of the following areas: advancing biological knowledge or management; mentorship, teaching and training; professional development and service; voluntary contribution; and commitment to the public. Any member is eligible to nominate such a candidate and to coordinate and compile the necessary support and information for a successful submission.

Coordinate

To engage more members in the nomination of Soper candidates, we have included the requirement for letters of support from multiple members in addition to the prime nominator. This requirement means the prime nominator coordinates with members to get a wide range of support, and in recent nomination packages we've seen individuals with knowledge of different aspects of the candidate's career involved in submitting supporting letters. In addition to support from members, we've also seen non-members with unique knowledge of the candidate adding their support to the nomination package. As with any annual process, there is a deadline for submissions. The deadline at the beginning of March allows time for review and assessment of the nomination by the Awards Committee and for the Board review before the announcement at the AGM.

Compile

The final step before submission involves compiling the comprehensive nomination package. In gathering the candidate's curriculum vitae/ resume, preparing a biographical overview, and completing brief descriptions of the candidate's qualifications (relating to biological knowledge, mentoring, professionalism, volunteerism, and public commitment), nominators observed that their candidate often had significant achievements that they were not aware of when they began the nomination process. Such observations inevitably strengthened the nomination. By making the nomination as complete as possible, nominators enable the review process including Board review to be fairly smooth.

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That's all there is to it. Details about the assessment process are outlined in the Soper Award Nomination Form; any questions should be directed to me, Dave Ealey, the Awards Chair at ealeyd@telusplanet.net .

Past recipients of ASPB's J. Dewey Soper Award: Dr. Stu Smith, P.Biol. (a founder of ASPB), Dr. Ian McTaggart-Cowan (Zoology professor at UBC), Dr. William Gunn (founder of LGL Consultants, an environmental consulting firm operating in Alberta), Mr. Richard Fyfe (a Research Scientist with the Canadian Wildlife Service, Edmonton), Dr. Valerius Geist (renowned wildlife [particularly bighorn sheep] behaviourist and environmental scientist at U. of Calgary), Dr. Stephen Herrero (bear biologist at U. of Calgary), Dr. Charley Bird (botany [mosses and lichens] professor at U. of Calgary and noted lepidopterist), Dr. Geoff Holroyd (endangered species Research Scientist at Canadian Wildlife Service, Edmonton), Dr. Joe Nelson (ichthyology professor at U. of Alberta), Dr. Ian Stirling (polar bear Research Scientist at Canadian Wildlife Service, Edmonton), Dr. Joyce Gould (botanist focusing on rare plants with Conservation and Recreation Planning, Alberta Tourism, Parks and Recreation), Peter Sherrington (eagle researcher and leader of citizen science initiative on bird migration through the Rocky Mountains, near Calgary), Dr. Gordon Stenhouse (grizzly bear researcher at The Foothills Research Institute, Hinton), and Dr. Robin Leech, P.Biol. (spider expert, biology instructor at NAIT, and a founding member of ASPB).

Top Ten Reasons to Nominate Your Publication * for a Peggy Thompson Publication Award (* or that of a fellow member)

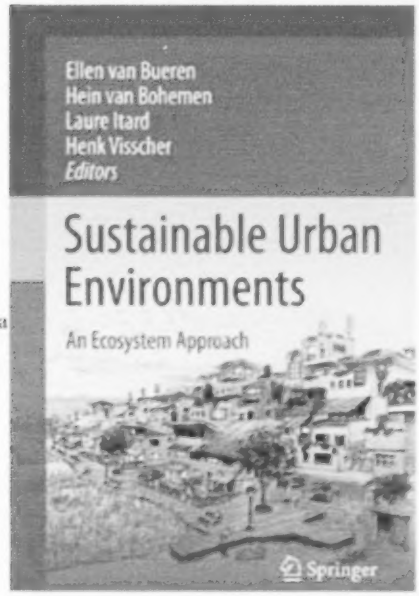
By Dave Ealey, P.Biol.

1. You'll be raising the profile of biological knowledge in the province of Alberta.
2. You'll be inspiring fellow ASPB members to raise the calibre of their publication efforts.
3. You'll be joining the ranks of some of Alberta's most respected biologists (for example, Valerius Geist [awarded in 1996 for his book Buffalo Nation], Elston Dzus [in 2000 for Status of the Woodland Caribou], Anne-Marie Anderson [in 1998 for her technical report on Impacts of Agriculture on Surface Water Quality in Alberta]).
4. You may be able to expand members' awareness of effective communication technologies by introducing new forms of what constitutes a "publication" (past examples include video [Cliff Wallis in 1993 for Birders of a Feather], websites [Luigi Morgantini in 1995 for a website on Resource Development and Wildlife], interpretive signage [Patricia Mitchell in 1998 for lakeside signage in provincial parks in the northern East Slopes region], and course manuals [Jay White in 2013 for Alberta Wetlands: From Classification to Policy]).
5. You'll receive an attractive plaque for display that shows the appreciation of your peers for your writing and communicating efforts.
6. Your publication will be reported to fellow members and others through ASPB's e-bulletin, the BIOS, and ASPB's website.
7. You'll be invited to the ASPB Annual General Meeting to be congratulated in person by the ASPB Board.
8. You'll gain bragging rights for a year.
9. You can add points to your professional competency status.
10. You probably have your own unique reason to add here!

The ASPB has been recognizing the publication skills of its members since its 1983 symposium. Following the untimely death of former ASPB Board member and talented writer Peggy Thompson, the award was renamed the Peggy Thompson Publication Award in 1985. Next year marks the 30th anniversary of that first award; take a moment to consider whether you or a colleague has written/produced/ posted a good, solid information product that deserves to be recognized. Nomination forms are available on the ASPB website. Good luck!

Book Review: Sustainable Urban Environments: An Ecosystem Approach

By S. K. Basu, P.Biol.



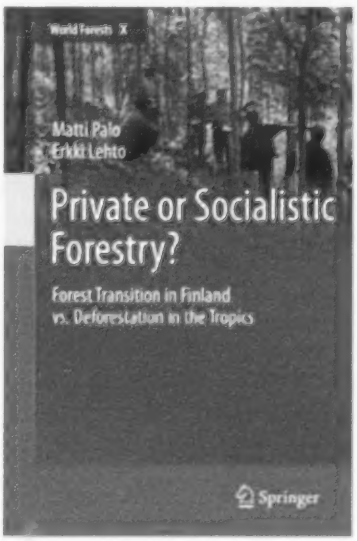
a The current volume is an excellent resource book dealing with the challenging issue of sustainable urban development from an ecological perspective. This is an edited volume with a number of authors representing diverse body of researchers, scientists, ecologists, economists and sociologists coming together to provide a comprehensive approach and better understanding of the challenges and opportunities of sustainable urban environments. This multi-disciplinary volume includes excellent suggestions from a team of experts in dealing with urban developments from the perspective of economic and ecological costs, renewable and non-renewable agencies, investigations on the role of individuals, governments, non-government organizations, international agencies and institutions, and challenges in developed, developing and under-developed countries in handling the issues successfully. Several green approaches, thematic models and practical options have been discussed, critiqued and challenged. The volume will certainly serve as an essential volume for those who are enthusiastic about sustainable living and developments.

The volume is divided into 15 chapters namely, Chapter 1: Introduction, Chapter 2: (Eco)System Thinking: Ecological Principles for Buildings, Roads and Industrial and Urban Areas, Chapter 3: Urban Ecology, Scale and Identity, Chapter 4: Water Flows and Urban Planning, Chapter 5: Energy in the Built Environment, Chapter 6: Material City: Towards Sustainable Use of Resources, Chapter 7: Air Quality and Human Health, Chapter 8: Liveability, Chapter 9: Urban Transport and Sustainability, Chapter 10: Sustainable Urban Form, Chapter 11: Environmental Strategies and Tools for Integrated Design, Chapter 12: Climate Integrated Design and Closing Cycles, Chapter 13: Governance Tools, Chapter 14: Managing Change, and Chapter 15: Conclusions and Solutions. Each chapter is distinct and complete with a short summary at the beginning and is interspersed with text including summary tables, word diagrams, schematic charts, occasional dialogue boxes and footnotes and an excellent bibliography at the end for serious readers to dig for more. An additional bonus aspect for students has been the inclusion of a questionnaire that highlights the key points/concepts discussed in that individual chapter.

The volume is well designed and easily navigable from one part to another due to inclusion of an excellent index at the end, a comprehensive list of all abbreviations used in the volume with a separate list of contents for all tables, figures/images, and dialogue boxes from different chapters making it easier for readers to jump onto a specific term, phrase or concept with relative ease. The editors deserve special credit for the structural arrangement of the volume in the most logical manner with diligent arrangement of essential topics with comprehensive detail within individual chapters. Some overlapping of information and content has spilled across a few chapters; however, this is an essential adjunct of any multi-authored edited volume. The editors have expended great effort in assembling excellent information and did an outstanding job in integrating a wide diversity of opinions, concepts, philosophies and technologies and successfully bringing them under one integrated platform. In future editions, a glossary of important terms and terminologies will be greatly beneficial for general and non-specialist readers to deal with the jargon of terms more easily. The section on contributing authors will provide researchers, and scientists working in similar fields, the opportunity to exchange valuable notes and provide a bridge for future communications. The current volume would be valuable and is strongly recommended as a foundational course or resource book for undergraduate and post-graduate students in the fields of Applied Forestry, Urban Ecology and Ecosystems and Environmental Science courses.

Sustainable Urban Environments: An Ecosystem Approach by Ellen van Bueren, Hein van Bohemen and Laure Itard Henk Visscher (Editors); 2012; Springer; Dordrecht Heidelberg London New York; Hardback & e-book/pdf versions available; ISBN (Hardback): 978-94-007-1293-5; e-ISBN: 978-94-007-1294-2; DOI 10.1007/978-94-007-1294-2
Contact the reviewer, Saikat Basu at saikat.basu@uleth.ca

Look for Saikat's next book review in an upcoming edition of BIOS.



GUTTATION IN PLANT LEAVES

By Robin Leech, P.Biol.

The plant leaf in the picture attending this article has not been sprayed with water. What you are seeing is a natural phenomenon where water has been pushed up from the roots of the plant to the leaves in a process called **guttation.** The plant pictured is most likely *Impatiens capensis.*

I first saw the results of guttation when our botany professor took us to a plant physiology lab back in 1956. Since then I have observed it many times, but did not have a camera handy. This picture was taken at the Wagner Natural Area, a few km west of Edmonton, in 2010 where my wife and I were collecting spiders.

To explain **guttation:** it is the exudation of drops of xylem sap at certain places along the edge of leaves of some vascular plants. Guttation is NOT to be confused with dew which condenses from the atmosphere onto leaf surfaces.

Transpiration usually does not occur at night because the stomata are closed. When there is a high soil moisture level, water will enter plant roots. The reason is that the water potential of the roots is lower than that of the soil solution. Because of this, water will leave the soil and start to accumulate in plant roots. This creates a slight root pressure. The root pressure forces some water up in the plant's xylem, then to the leaves where it exudes through special leaf tip and edge structures, called **hydathodes** or water glands, where water drops form. Root pressure provides the impetus for this flow (rather than transpirational pull).

Water often contains a variety of organic and inorganic compound (sugars, mineral nutrients, and potassium); when the guttation droplets evaporate, a white crust often remains on the leaf surface. The white crust would not form after dew drops evaporate.

Acknowledgements. I thank my wife, Lorie, for helping with the spider collecting at the Wagner Natural Area, my good friend of many years, Peter Kuchar, for the plant identification.

Photo Credit: Robin Leech, P.Biol.

ASPB Student Presentation Award

Nils Anderson meets a new friend while traveling in Mongolia. Photo used with permission.

At the Prairie Conservation and Endangered Species Conference held in Red Deer in February, the Alberta Society of Professional Biologists recognized Nils Anderson with a student award of $500 for his humorous and original presentation. Members of the Board who attended the presentation entitled "Beavers *(Castor canadensis)* as ecosystem engineers in pothole wetlands: Implications for amphibians," appreciated the confidence and humour in front of an audience, and his original artwork. The award was based on originality of work and presentation skills. This award is generously donated by Dr Robin Leech, P.Biol.